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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,154	01/20/2004	Yuh-Ren Shen	250913-1100	4610

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EXAMINER

JANKUS, ALMIS R

ART UNIT PAPER NUMBER

2628

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/761,154	SHEN	
	Examiner	Art Unit	
	Almis R. Jankus	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 8, 11-13, 15, 16 and 18 is/are rejected.
- 7) ☒ Claim(s) 4, 7, 9, 10, 14, 17 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-19 are presented for examination.

2. The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 5, 6, 8, 11-13, 15, 16 and 18 are rejected under 35

U.S.C. 102(e) as being anticipated by Wen et al.

With respect to claim 1, Wen et al. teach the claimed pixel structure of transfective LCD disposed between a first data line and a second data line, comprising: a reflective cell comprising a first transistor and a first reflective electrode, wherein the first transistor comprises a gate coupled to a scan line, a source coupled to the first data line, and a drain coupled to the first reflective electrode, and the first transistor is covered by the first reflective electrode; and a transmission cell comprising a second transistor and a transparent electrode, wherein the second transistor comprises a gate

coupled to the scan line, a source coupled to the second data line, and a drain coupled to the transparent electrode, and the second transistor is covered by a second reflective electrode, at paragraphs [0017] and [0018], and at figures 2 and 6. The first and second data lines are taught at figure 2 as DL1 and DL2; reflective cell at figure 2 item 210; a first transistor at figure 2 item 201; a first reflective electrode at paragraph [0017] and at figure 2 item 205 which is a contact hole connecting the transistor to the reflective electrode; a gate coupled to a scan line, at figure 2, SL1 connected to the gates of the transistors; a source coupled to the first data line at figure 2 DL1 connected to the source at 203; a drain coupled to the first reflective electrode at paragraph [0017] and at figure 2 item 205 being the contact hole for the drain coupling to the first reflective electrode; the first transistor is covered by the first reflective electrode at paragraph [0017] with “In this embodiment of the present invention, the data line DL1, DL2 and the switching element 201, 202 are located below the reflection region 210 for not affecting the aperture ratio”; a transmission cell comprising a second transistor and a transparent electrode, at paragraph [0017] and at figure 2 with the transmission cell at item 220; second transistor at item 202; and a transparent electrode at figure 2 contact hole 206 connecting the transmissive electrode to the second transistor; the second transistor comprises a gate coupled to the scan line, at figure 2 with SL1 connected to the gate of 202; a source coupled to the second data line, at figure 2 with DL2 connected to the source of 202 at contact hole 204; a drain coupled to the transparent electrode, at paragraph [0017] with “the second switching element 202 is connected to a transmissive electrode (not shown) by a contact hole

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206 for controlling the luminance of the transmission region 220” and at figure 2 item 206 being the contact hole connecting the drain to the transparent electrode; and the second transistor is covered by a second reflective electrode, at figure 6 and at paragraph [0018] with “the second switching element 232 are located below a reflection pixel region of a neighboring pixel region for not affecting the aperture ratio”.

Claim 2 further requires the pixel structure of transfective LCD of claim 1, wherein the second reflective electrode is a first reflective electrode of another pixel structure.

Wen et al. teach this at figure 6 and at paragraph [0018] with “the second switching element 232 are located below a reflection pixel region of a neighboring pixel region for not affecting the aperture ratio”.

Claim 3 further requires the pixel structure of transfective LCD of claim 1, wherein the drain of the first transistor is coupled to the first reflective electrode by a first plug, and the drain of the second transistor is coupled to the transmission electrode by a second plug. Wen et al. teach this at figure 2 items 205 and 206.

Claim 5 is similar to claim 1 and is rejected under the rationale applied to similar respective features of claim 1.

Claim 6 is similar to claim 3 and is rejected under the rationale provided for the rejection of claim 3.

Claim 8 is similar to claim 3 but further requires the data lines to be bent. Wen et al. teach this at figure 12 items 403 and 405.

Claim 11 is similar to claim 1 but further requires a second scan line. Wen et al. teach this at figure 7.

Claim 12 is similar to claim 2 and is rejected under the rationale provided for the rejection of claim 2.

Claim 13 is similar to claim 3 and is rejected under the rationale provided for the rejection of claim 3.

Claim 15 is similar to claim 1 and is rejected under the rationale applied to similar respective features of claim 1.

Claim 16 is similar to claim 3 and is rejected under the rationale provided for the rejection of claim 3.

Claim 18 further requires the pixel structure of transfective LCD of claim 15, wherein the first transistor and the second transistor are disposed on different sides under the

transparent electrode. Wen et al. teach this at figure 12 where 401 and 402 are on different sides.

4. Claims 4, 7, 9, 10, 14, 17 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


5. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not fairly teach the claimed metal layers under the plugs acting as storage capacitors.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Almis R. Jankus whose telephone number is 571-272-7643. The examiner can normally be reached on M-F, 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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